**CALIFORNIA STATE UNIVERSITY, SAN BERNARDINO**

**SCHOOL OF COMPUTER SCIENCE & ENGINEERING**

**CSE 572 S18: DATABASE DESIGN PROJECT**

**PROJECT OPTION**

**Coyote Inland Empire Art Museum**

**TEAM NAME**

**TEAM MEMBERS**

***Khan, Hamza***

***Butarbular, Edmund***

**Assumptions/Questions:**

* For our diagram we believed that having the storage location, id number of the collection, storage location, etc, because it would allow other departments to access the information in one location without going to other departments. For example, if the public wanted to know other pieces in that artwork collection all they would have to do is press see more pieces in this collection and it would take the id collection number and pull up all the artworks in that collection in that museum. We did separate out other aspects like the maintenance history and required maintenance and all that information can be found by getting the maintenance code from the artwork database
  + We cleared this assumption up with the professor by explaining to him our thought process and how it would fit in with our entire program.
* We originally assumed that slides could be considered an art type
  + This assumption was cleared by the professor who explained to us that slides are a completely different entity because they could contain slides of work that isn’t in the museum.

**Data Dictionary:**

|  |  |  |
| --- | --- | --- |
| **Entity** | **Attribute(s)** | **Definition/Description** |
| Artwork | artwork\_id {pk} | This is the primary key for each piece of artwork so that the museum can gain alter and get information about the artwork. |
|  | total\_count | Gives the Artwork Collections department access to the total number of artworks in the museum |
|  | dimensions | Gives the Maintenance department the specific dimensions of a piece of artwork |
|  | dimensions\_unit\_of\_measurement | Gives the Maintenance department the units the dimensions are provided in |
|  | name | Describes the name of the artwork |
|  | art\_type | Describes what type of art it is like is it an oil painting, watercolor painting, sculpture etc. |
|  | weight | Gives the Maintenance department the weight of the artwork |
|  | weight\_unit\_of\_measurement | Describes to the Maintenance department the units of measurement the artwork was weighed |
|  | storage\_location | Allows the shipping and receiving department to update the storage location of the artwork and informs the maintenance department where the artwork is stored |
|  | id\_number\_of\_collection | Allows certain departments access to know what collection the artwork belongs through this id. |
|  | current\_appraised\_value | Describes how much a specific piece of artwork is worth through it’s most recent appraisal. |
|  | maintenance\_code | Gives the maintenance department the artworks maintenance id to get access to its maintenance schedule. |
|  | month\_and\_year\_exhibit | Describes when the exhibit will be put up in the museum. |
|  | on\_loan | Lets the shipping and receiving department describe if the artwork is on loan from another museum. |
|  | is\_slide | Allows the museum to know a slide exists for the artwork. |
| Membership | member\_id | This is the primary key for the membership database so that the public relations department can find a specific member to the museum |
|  | member\_name | This gives the public relations department the members full name |
|  | member\_addess | This gives the public relations department the members mailing address for member renewal and offers |
|  | donation\_or\_appraised\_dollar\_amount | This gives the public relations department the right to accept artwork donations or appraised dollar amount of an artwork to cover a membership |
|  | date\_of\_donation | Allows the public relations department to describe when the artwork was donated by a member |
|  | membership\_type | Allows the public relations department to describe or edit what type of membership the member is part of. |
| Maintenance | maintenance\_id | This is the primary key to describe maintenance employee. |
|  | date\_of\_last\_maintenance | This allows the maintenance department to get the last date of maintenance for a piece of artwork |
|  | required\_maintenance | This allows the maintenance department to get the required maintenance the artwork needs |
|  | maintenance\_history | This allows the maintenance department access to all the maintenance that the specific piece of artwork has been through |
|  | scheduled\_unscheduled | This allows the maintenance department to know if the artwork has a scheduled maintenance or unscheduled and based on that they can get more information about the artwork from the artwork database. |
| Shipping and Receiving | shipping\_id | This is the primary key to describe the shipping and receiving employee. |
|  | scheduled\_shipments | This informs the shipping and receiving department on what pieces of artwork is being scheduled for shipment |
|  | receipts | This should give the shipping and receiving department to alter the artwork database to add artwork to the museum. |
| Purchase | purchase\_id | This is the primary key to allow the public relations department to create a unique sale number for each artwork purchase |
|  | purchase\_name | This allows the public relations department to describe who is buying a piece of artwork |
|  | purchase\_value | This allows the public relations department to describe how much the buyer paid for a piece of art work |
|  | purchase\_artwork | This allows the public relations department to describe what piece(s) of artwork a person bought. |
| Artwork on Loan | loan\_id | This is the primary key that the shipping and receiving department set so |
|  | loan\_name | This is set by the shipping and receiving department to describe which museum the artwork came from and allows the artwork collections department access to this information |
|  | loan\_address | This is set by the shipping and receiving department to describe where the museum the artwork came from and allows the artwork collections department access to this information |
|  | loan\_ship\_date | This is set by the shipping and receiving department to describe when the artwork has to be shipped to its next location and can be viewed by the maintenance department to do any maintenance before it needs to be shipped |
| Public Relation | pr\_id | This is the primary key for the public relations department describing who the employee is making any changes. |
| Publishing | publishing\_id | This is the primary key for the publishing department describing who the employee is access all the artwork information |
| Artwork Collections | artwork\_collection\_id | This is the primary key for the artwork collection department describing who the employee is access specific artwork information |
| Slides | slide\_id | This is the primary key for slides database to search for an artwork’s slides based on an artwork. |
|  | slide\_name | This is the name of the artwork for a specific slide. |

**Business Rules:**

**Common Comments:**

* **Hamza** 
  + The difficulties that I faced with this project was setting up the part A. The reason I say that is because when I was reading the prompt for my portion of the project it was a bit convoluted, because it was linking multiple departments straight from the get go. The way I was able to conquer this problem was by creating a word document and sub sections for each department and then from that information I was able to create the ER diagram to satisfy the requirements that the museum needed and make it more accessible for the public and researchers.
  + The things I liked about this project was that I was able to get a better hand at how to create an ER diagram and how they work and how to create them. What I disliked was the confusing wording in the prompt and finding a way to describe each action in the ER diagram.
  + The most challenging aspects about this portion was the naming of each relationship because I had merged a lot of information into one database, but I was able to figure it out in the end.
  + The only suggestion I would have is to give a bit for practice with ER diagrams because they can be a bit complicated when the prompt isn’t completely clear with what they want you to do.
* **Edmund**

**Personal Comments:**

* **Hamza** 
  + The portions of this project that I dealt with personally was with the creation of the ER document and the data dictionary.
  + Edmund was helpful with helping me create the relationships and creating the attributes for each portion of the ER diagram.
* **Edmund**